

Title (en)

Aqueous ink, ink jet recording method, ink cartridge, recording unit and ink jet recording apparatus

Title (de)

Wässrige Tinte, Tintenstrahlaufzeichnungsverfahren, Tintenbehälter, Aufzeichnungseinheit und Tintenstrahlaufzeichnungsgerät

Title (fr)

Encre aqueuse, méthode d'enregistrement par jet d'encre, réservoir d'encre, unité d'enregistrement et appareil d'enregistrement par jet d'encre

Publication

**EP 1780247 A3 20070919 (EN)**

Application

**EP 06122413 A 20061017**

Priority

JP 2005314707 A 20051028

Abstract (en)

[origin: EP1780247A2] The invention provides an aqueous ink comprising a polymer having hydroxyl groups and a pigment, which can provide images excellent in scratch resistance and highlighter resistance and can inhibit the seeping out phenomenon of the polymer and the deterioration of ejection characteristics even when it is stored for a long period of time. The aqueous ink comprises a polymer having hydroxyl groups, a pigment and a water-soluble organic solvent, wherein the water-soluble organic solvent comprises a poor medium for a polymer that is not adsorbed on the pigment of the polymer having hydroxyl groups, and wherein when the segment constituting the polymer that is not adsorbed on the pigment of the polymer having hydroxyl groups is comprised of a segment A having hydroxyl groups and a segment B having no hydroxyl group, at least one of the poor medium is a good medium for either one of the segment A and the Segment B.

IPC 8 full level

**C09D 11/00** (2006.01)

CPC (source: EP US)

**C09D 11/322** (2013.01 - EP US); **C09D 11/326** (2013.01 - EP US)

Citation (search report)

- [X] EP 0616017 A2 19940921 - CANON KK [JP]
- [X] EP 1291397 A1 20030312 - SEIKO EPSON CORP [JP]
- [PX] EP 1609807 A1 20051228 - MITSUBISHI CHEM CORP [JP]
- [A] WO 2004067287 A1 20040812 - CANON FINETECH INC [JP], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1780247 A2 20070502; EP 1780247 A3 20070919; EP 1780247 B1 20110406**; CN 1955236 A 20070502; CN 1955236 B 20110209; DE 602006021116 D1 20110519; US 2007097155 A1 20070503; US 8324293 B2 20121204

DOCDB simple family (application)

**EP 06122413 A 20061017**; CN 200610150137 A 20061027; DE 602006021116 T 20061017; US 55046406 A 20061018